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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/027,787
Filing Date: December 20, 2001
Appellant(s): FISH ET AL.

Alan R. Marshall
<u>For Appellant</u>

SUPPLEMENTAL EXAMINER'S ANSWER

This is in response to the appeal brief filed January 19, 2007, and the Return Order of December 4, 2007 to clarify the status of claims 35 and 36, appealing from the Office action mailed February 21, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

GROUNDS OF REJECTION NOT ON REVIEW

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief:

Claims 2 – 10, 12 – 14, 16 – 20, 22 – 24, 26 – 34, and 36 – 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. in view of Tanzer et al. *The applicant is only appealing the rejection of claims 1, 15, and 25 over Bjornberg et al. in view of Tanzer et al. While the final rejection states that claim 35 and not claim 36 is rejected over Bjornberg et al. in view of Tanzer et al., this is not a new ground of rejection, but is to correct an inadvertent typo that is clearly understood based on the record.*

Claims 2 – 10, 12 – 14, 16 – 20, 22 – 24, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. and Tanzer et al. *The applicant is only appealing the rejection of claims 1 and 15 over Baer et al. and Tanzer et al.*

Claims 26 – 34, 36 – 39, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. and Tanzer et al., as applied above, and further in view of Bjornberg et al. *The applicant is only appealing the rejection of claim 25 over Baer et al., Tanzer et al., and Bjornberg et al.*

Claims 11, 21, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. and Tanzer et al. as applied to claims 1, 15, and 25 above, and in further view of Taylor et al.

Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. and Tanzer et al. as applied to claims 1 and 15 above, and in further view of Taylor et al. for the reasons of record.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al., Tanzer et al., and Bjornberg et al. as applied to claim 25 above, and in further view of Taylor et al. for the reasons of record.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,892,535	BJORNBERG et al.	1-1990
5,332,613	TAYLOR et al.	7-1994
5,411,497	TANZER et al.	5-1995
5,938,650	BAER et al.	8-1999

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

I. Claims 1 – 10, 12 – 20, 22 – 34, and 36 – 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. in view of Tanzer et al.

The rejection has been changed from the Office Action mailed on February 21, 2006, to remove claim 35 and add claim 36 which is not a new grounds of rejection. The change has been made to the rejection to correct an inadvertent typo, which is clear from the record since the rejection addresses the color masking features in claims 12, 22, and 36, and not the elastic feature of claims 11, 21, and 35.

Bjornberg et al. discloses an absorbent pad having a liquid-impervious back sheet, regions of absorbent material, and a liquid-pervious cover sheet (abstract). The cover sheet has pockets formed therein, in which the regions of absorbent material are disposed. The regions of absorbent material are placed in the pocket regions via a vacuum (column 3, lines 8 – 19). The cover sheet is then bonded, either adhesively or by heat sealing, directly to the back sheet along lines which separate the regions of absorbent material (abstract). The bond lines form channels

along which the liquid can travel. The liquid impervious backing sheet is made from conventional backing sheet materials such as a polyethylene film with a thickness of 0.10 mm to 0.050 mm (column 3, lines 59 – 62). The cover sheet can be made from any non-woven materials which are conventionally used in the disposable diaper art (column 4, lines 35 – 40). The absorbent material is made from absorbent material which has a high capacity to absorb liquid and any conventional absorbent material can be used (column 4, lines 1 – 9).

The pocket regions formed by bonding the cover sheet to the back sheet can be in various shapes such as a diamonds, squares, hexagons, or triangles (column 4, lines 13 – 17). The pockets can range in size from 10 x 10mm up to 100 x 100mm, and Bjornberg et al. discloses the diamond shape has a size of 62 x 28mm (column 4, lines 25 – 28). Thus, the diamond shape has a length to width ratio of greater than 2. And the size range for the pocket regions can produce a length to width ratio of up to 100:10, or 10. The depth of the pockets can vary from 1 to 20 mm or more (column 4, lines 33 – 34). Thus, the width to height ratio can range from 10:20 to 100:1, or 0.5 to 100.

Bjornberg et al. discloses that the composite includes a liquid impervious back sheet, which is made from conventionally used liquid-impervious back sheet materials diapers, which include film layers (column 3, lines 57 – 63). However, Bjornberg et al. fails to teach using a film layer which is impermeable to liquids and permeable to gases. Tanzer et al. is drawn to absorbent articles. Tanzer et al. discloses that absorbent article can have a back sheet layer made from various materials such as film layers or woven or nonwoven fabric layers which is constructed or treated to impart the desired level of liquid impermeability (column 6, lines 37 – 45). Further, Tanzer et al. discloses that the back sheet layer may be a breathable material which

permits vapor to escape from the absorbent structure while preventing liquid exudates from passing through the backsheet (column 6, lines 60 – 65). Further, examples of these breathable layers include microporous films or coated or treated nonwoven fabrics (column 6, lines 65 – 68). Therefore, it would have been obvious to one of ordinary skill in the art to substitute the breathable film layer, as taught by Tanzer et al., for the back sheet of the absorbent taught by Bjornberg et al. since Tanzer et al. teaches that the breathable film layer is a known type of backsheet for absorbent composites and would allow moisture vapor to escape out of the composite while preventing liquid from passing through the layer. Further, Bjornberg et al. teaches that layers which are conventionally used as back sheets in diapers or absorbent products can be used as the back sheets.

Additionally, the claims recite that the layers are texturized by using heat and pressure to form elevations and depressions. This limitation is method limitation used to define the product structure. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. If the product in the product-by-process claim is the same or an obvious variant from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). In the present claim, the method limitation, would produce a composite structure comprising a top sheet and back sheet discontinuously bonded together with unbonded pocket regions between the two outer layers, wherein the pocket regions are not flat, but extend out from the bonded regions of the composite. Further, the claim only requires that the elevations and depressions have some difference in height between the elevated and depressed regions, since the claim does not recite a specific height for the elevations.

Bjornberg et al. discloses that a first layer is thermoformed to produce an embossed pocket, by using heat and suction (column 5, lines 40 – 56), filled with an absorbent material using suction (column 6, lines 24 – 35), and then bonded, using adhesive or heat and pressure, to a base layer (column 6, lines 65 – column 7, line 20). This process is the same as the process described by the applicant (specification, page 23 – 24) and shown in Figure 4, which combines one flat surface to one textured fabric to produce a final composite structure wherein both layers form pockets which extend out from the bonded regions of the composite. Finally, the layers can be heat welded together to create the bond lines which form the pocket regions. Thus, Bjornberg et al. teaches a method that the applicant teaches can be used to produce a composite wherein both outer layers extend outward in the pocket regions. Therefore, Bjornberg et al. discloses the claimed structure wherein both composite layers have elevations the extend out in the pocket regions because it teaches using a method disclosed by the applicant to make the claimed product.

Further, the composite disclosed by Bjornberg et al. is produced from flexible film or fabric layers. These layers would inherently bulge out in the pocket regions, forming regions with elevations and depressions, even if they are not embossed because the force of the filling material on the surrounding pocket would push outwards on both the upper and lower composite layers. This outward force would rearrange the shape of the pocket causing the bottom surface to bulge out to some degree because the bottom layer supports a majority of the weight of the absorbent material in the pockets. Thus, the bulge of the bottom layer qualifies as an elevation in the pocket region. Further, the cover layer is clearly taught by Bjornberg et al. as having

elevated and depressed regions. Thus, both layers comprise elevated and depressed regions, which is the structure required by the recited method limitation. Therefore, claims
The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). Thus, claims 1 – 6, 9, 13, 25 – 30, 33, 37, 39, 40, and 42 are rejected.

Claims 10 and 34 are also rejected since the unfused portion would inherently be permeable to liquid due to the porous nonwoven cover sheet, while the fused portion would inherently be impermeable to liquid due to the adhesive or heat welding bonding the permeable cover sheet directly to impermeable backing sheet. If the fused portion was not impermeable then the back sheet would no longer be impermeable either.

The features of Bjornberg et al. have been set forth above. Bjornberg et al. discloses that the back sheet is made from a film layer having a thickness of 0.010 mm to 0.050 mm and the cover sheet can be made from nonwoven materials. However, Bjornberg et al. fails to teach the thickness of the nonwoven layer. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a nonwoven material having the claimed thickness, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill in the art would choose a nonwoven sheet which is as thin as possible to cut down on the bulk and overall thickness of the absorbent pad. Thus, claims 7, 8, 15 – 20, 23, 31, 32, and 41 are rejected.

Further, Bjornberg et al. fails to teach that the nonwoven fabric would mask the color of the absorbent material. However, it would have been obvious to one having ordinary skill in the art to choose a nonwoven material which would block the color of the absorbent material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. In this case, one of ordinary skill in the art would desire a nonwoven material which while remaining porous, would cover the absorbent material sufficiently so that the absorbent material would not be able leak out of the absorbent pad through the porous nonwoven layer. Therefore, one of ordinary skill in the art would choose a nonwoven that has small pores that only liquid could pass through which would result in the absorbent material being masked by the nonwoven cover layer. Thus, claims 12, 22, and 36 are rejected.

Finally, Bjornberg et al. fails to teach the amount of fused area as compared to the amount of unfused portions. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed percentage of fused area, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, as set forth above. One of ordinary skill in the art would choose an amount of fused portions that would sufficiently hold the cover sheet and back sheet together while leaving a sufficient amount of unfused portion so that there is enough absorbent material to readily absorb liquids applied to the absorbent pad and the regions are spaced far enough apart so that the liquid can easily flow to dry areas in the absorbent pad. Therefore, claims 14, 24, and 38 are rejected.

II. Claims 1 – 10, 12 – 20, 22 – 24, 40, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. in view of Tanzer et al.

Baer et al. discloses an absorbent pad comprising two thin outer layers, at least one being porous, and a quantity of superabsorbent particles provided between the outer layers in individual unbonded open zones, or pockets, defined by intersecting heat bond lines (abstract). As shown in Figures 5 – 7, the pocket regions can be formed in various shapes. The outer layers are made from either nonwoven materials or film materials (column 3, lines 18 – 32). The absorbent core is very thin, having an overall thickness of less than 7 mm, or about 0.28 in (column 4, lines 28 – 30). The composite is structure as shown in Figure 1, wherein both outer layers are textured with elevations and depressions, such that the pocket regions extend out from the bonded regions. Particles are deposited on the lower layer by a powder meter or other suitable applicator, then the top layer is applied to the composite, and then the layers are passed through a pair of rollers under heat and pressure to form the bond lines. (column 3, line 57 – column 4, lines 4).

Baer et al. fails to disclose the width to height ratio and the length to width ratio of the pocket regions. However, Baer et al. discloses that different bonding patterns can be used to form different sized pocket areas (Figures 2 and 5 – 7). Further, Baer et al. discloses that the bonding lines act as channels and allow excess fluid to flow quickly to adjacent and more remote pockets for additional absorption (column 2, lines 29 – 34). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the shape and size of the pocket regions to the claimed length to width and width to height ratios of the pocket region, since it has been held that where the general conditions of a claim are disclosed in the

prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Further, one of ordinary skill in the art would choose the modify the shape or size of the pocket region to control the distribution of the absorbent material and the shape of the pocket regions so that the liquid will readily flow to the dry areas and be efficiently absorbed by the absorbent core.

Baer et al. disclose that the composite layers includes one film layer if the layer is designed to be the outermost layer of the absorbent composite (column 3, lines 27 – 31). Further, Baer et al. teaches that the absorptive core can be used as an absorbent product without any additional layers (column 5, lines 15 – 18). However, Baer et al. fails to teach using a film layer which is impermeable to liquids and permeable to gases. Tanzer et al. is drawn to absorbent articles. Tanzer et al. teaches that absorbent articles preferably have a substantially liquid impermeable outer layer to prevent exudates contained in the absorbent structure from wetting articles which contact the absorbent article (column 6, lines 16 – 30). The back sheet layer can be made from various materials such as film layers or woven or nonwoven fabric layers which is constructed or treated to impart the desired level of liquid impermeability (column 6, lines 37 – 45). Further, Tanzer et al. discloses that the back sheet layer may be a breathable material which permits vapor to escape from the absorbent structure while preventing liquid exudates from passing through the backsheet (column 6, lines 60 – 65). Further, examples of these breathable layers include microporous films or coated or treated nonwoven fabrics (column 6, lines 65 – 68). Therefore, it would have been obvious to one of ordinary skill in the art to substitute the breathable film layer, as taught by Tanzer et al., for the back sheet of the absorbent composite taught by Baer et al. since Baer et al. and Tanzer et al. teach that the outermost layer

of the absorbent composite should be made from a liquid impermeable material and Tanzer et al. teaches that the a liquid impermeable, moisture permeable, breathable film layer is used as a backsheet for absorbent composites because it allows moisture vapor to escape out of the composite while preventing liquid from passing through the layer. Thus, claims 1 – 6, 9, 13, and 40 are rejected.

Claims 10 and 34 are also rejected since the unfused portion would inherently be permeable to liquid due to the porous cover sheet, while the fused portion would inherently be impermeable to liquid due to the adhesive or heat welding bonding the permeable cover sheet directly to impermeable backing sheet. If the fused portion was not impermeable then the back sheet would no longer be impermeable either.

Further, even though Baer et al. fails to teach the thickness of the individual substrate layers, Baer et al. discloses that the overall thickness of the absorbent core is less than 7 mm, or about 0.28 in. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a nonwoven and film layers having the claimed thickness, since Baer et al. discloses that the thickness of the composite is less than 7mm and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill in the art would be motivated to choose thin substrate layers so that the overall thickness of the absorbent core would not exceed 7 mm and less than 0.1 in. Therefore, claims 7, 8, 15 – 20, 23, 31, 32, and 41 are rejected.

Further, Baer et al. fails to teach that the nonwoven fabric would mask the color of the absorbent material. However, it would have been obvious to one having ordinary skill in the art

to choose a nonwoven material which would block the color of the absorbent material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use, as set forth above. In this case, one of ordinary skill in the art would desire a nonwoven material which while remaining porous, would cover the absorbent material sufficiently so that the absorbent material would not be able leak out of the absorbent pad through the porous nonwoven layer. Therefore, one of ordinary skill in the art would choose a nonwoven that has small pores that only liquid could pass through which would result in the absorbent material being masked by the nonwoven cover layer. Thus, claims 12, 22, and 36 are rejected.

Finally, Baer et al. fails to teach the amount of fused area as compared to the amount of unfused portions. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed percentage of fused area, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, as set forth above. One of ordinary skill in the art would choose an amount of fused portions that would sufficiently hold the cover sheet and back sheet together while leaving a sufficient amount of unfused portion so that there is enough absorbent material to readily absorb liquids applied to the absorbent pad and the absorbent regions are spaced far enough apart so that the liquid can easily flow to dry areas in the absorbent pad. Therefore, claims 14, 24, and 38 are rejected.

III. Claims 25 – 34, 36 – 39, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. and Tanzer et al. as applied above, and further in view of Bjornberg et al.

The features of Baer et al. and Tanzer et al. have been set forth above. Baer et al. discloses a method of making a composite by providing two outer layers, depositing an absorbent material on the surface of one of the layers, and then bonding the layers together with heated pattern rollers which texturize the layers to form a pocketed composite material. However, Baer et al. fails to teach using a vacuum force to apply the particles to the substrate. Bjornberg et al. is drawn to a method of making pocketed composites. Bjornberg et al. discloses a process using thermo-formable layers wherein the pockets are formed by drawing a vacuum on the inside of a patterned drum while applying heat to form pockets in the sheets (column 2, lines 60 – 68). The shaped pocket regions are then filled with absorbent material, by passing the shaped pockets over a vacuum while the absorbent material is deposited onto the composite (column 6, lines 24 – 35). The outer layers are then either glued or thermally bonded together (column 7, lines 15 – 25). As shown in Figure 5, vacuum forming the nonwoven material produces uniformly shaped pockets which hold the particles. The absorbent composite is produced without leaving any excess absorbent material outside the pocket regions in the bonded regions of the absorbent composite (column 6, lines 45 – 55). Thus, it would have been obvious to one having ordinary skill in the art to have used a vacuum method to supply to particles, as taught by Bjornberg et al., in the composite of Baer et al., since using vacuum suction to form and fill the pockets would give the manufacturer more control over the amount and location of particles in the composite material as well as the uniformity of the pockets. Therefore, claims 25 – 34, 36 – 39, and 42 are rejected.

IV. Claims 11, 21, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. and Tanzer et al. as applied to claims 1, 15, and 25 above, and in further view of Taylor et al.

The features of Bjornberg et al. and Tanzer et al. have been set forth above. Bjornberg et al. fails to teach using an elastic component in the absorbent composite pad. Taylor et al. is drawn to nonwoven materials. Taylor et al. teaches that there has been a continuing need for elastic material having a low elastic modulus and which retains its low elastic modulus during elongation to provide a soft, gentle elasticity (column 1, lines 15 – 20). Further, an elastic material having a low elastic modulus and which retains its low elastic modulus during elongation would be particularly desirable for use in disposable diapers and other personal care products because articles manufactured from such materials are able to softly and gently conform to the body of a wearer and repeatedly extend and retract without creating uncomfortable pressure against the skin (column 1, lines 25 – 32). Therefore, it would have been obvious to one of ordinary skill in the art to use an elastic material as taught by Taylor et al. in the absorbent article taught by Bjornberg et al. to produce an absorbent composite pad which would be able to softly and gently conform to the body of a wearer and repeatedly extend and retract without creating uncomfortable pressure against the skin. Therefore, claims 11, 21, and 35 are rejected.

V. Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. and Tanzer et al. as applied to claims 1 and 15 above, and in further view of Taylor et al.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al., Tanzer et al., and Bjornberg et al. as applied to claim 25 above, and in further view of Taylor et al.

The features of Baer et al., Tanzer et al., and Bjornberg et al. have been set forth above. Baer et al. fails to teach using an elastic component in the absorbent composite pad. Taylor et al. is drawn to nonwoven materials. Taylor et al. teaches that there has been a continuing need for elastic material having a low elastic modulus and which retains its low elastic modulus during elongation to provide a soft, gentle elasticity (column 1, lines 15 – 20). Further, an elastic material having a low elastic modulus and which retains its low elastic modulus during elongation would be particularly desirable for use in disposable diapers and other personal care products because articles manufactured from such materials are able to softly and gently conform to the body of a wearer and repeatedly extend and retract without creating uncomfortable pressure against the skin (column 1, lines 25 – 32). Therefore, it would have been obvious to one of ordinary skill in the art to use an elastic material as taught by Taylor et al. in the absorbent article taught by Baer et al. to produce an absorbent composite pad which would be able to softly and gently conform to the body of a wearer and repeatedly extend and retract without creating uncomfortable pressure against the skin. Therefore, claims 11, 21, and 35 are rejected.

(10) Response to Argument

I (A). The applicant argues that Bjornberg et al. and Tanzer et al. fails to teach a composite wherein each substrate is textured to possess elevations and depressions (Appeal Brief, pages 6 – 10). As set forth above, the patentability of the product is based on the structure of the product and not the method of making the product. Thus, the claim requires that the final product has only some degree of depressions in the bonded regions and elevations in the pocket regions.

As discussed above, the composite disclosed by Bjornberg et al. will settle to some degree after the vacuum suction is removed, allowing the absorbent materials to move and settle

in the pocket regions. This will in turn cause the shape of the flexible outer layers to reform due to the forces pushing outwardly on the pocket regions by the absorbent material inside the pocket. This rearrangement will mostly reshape the back sheet, causing it to bulge out to at least a small degree since the backsheet supports the majority of the weight of the absorbent material in the pocket region. Thus, both layers are textured to some degree as required in the claims.

The applicant argues that the back sheet of Bjornberg et al. remains *substantially* flat, as shown in the figures (Appeal Brief, page 6). However, the picture is not an exact representation, and while the product might be *substantially* flat, substantially flat is not the same as completely flat and totally absent of any changes in depth on the bottom layer. The terms elevations and depressions do not require any specific difference in height between the elevated and depressed regions. Thus, any difference would read on the claimed elevations and depressions. The method of making the texturing is not given weight in the product claims, the product only need to produce the elevations and depressions in the final product. Further, it would have been an obvious matter of design choice to change the shape of the bottom layer, since such a modification would have involved a mere change in the size of a component. A change of size is generally recognized as being within the ordinary level of skill in the art. *In re Dailey*, 357 F.2nd 669, 149 USPQ 1966. Thus, claimed product is obvious over Bjornberg et al.

Additionally, as set forth above, the process described by Bjornberg et al. discontinuously bonds a textured layer to a flat layer to produce filled pockets, which is similar to the process disclosed by the applicant in Figure 4 which bonds a flat layer to a textured layer and produces a finished product wherein both outer layers contain elevations and depressions. And, the layers can be heat welded together at the bond lines. Thus, Bjornberg et al. uses the same process as

disclosed by the applicant, which the applicant discloses produces elevations and depression in both outer layers of the composite. Further, it is noted that when the bond lines are applied by heat sealing, heat and pressure are applied to both the outer layers only at the bond line regions. Thus, the heated pattern roller applied on one side of the composite will compress and texture the both outer layers in only bond regions because the pressure is only applied to the back sheet at the bond lines, compressing and bonding the back in the bond regions and not in the pocket regions. Thus, both outer layers have elevations and depressions.

The applicant has not provided any evidence showing that the method taught by Bjornberg et al. is substantially different, so that it would not produce the same final product as the method disclosed by the applicant in Figure 4. The applicant only argues that Bjornberg et al. shows a flat bottom in the figures, and Bjornberg et al. does not recognize the bottom sheet will be texturized (Appeal Brief, page 9). However, it has been held that as long as there is evidence of record establishing inherency, failure of those skilled in the art to contemporaneously recognize an inherent property, function or ingredient of a prior art reference does not preclude a finding of anticipation. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1349, 51 USPQ2d 1943, 1948 (Fed. Cir. 1999). Further, it is noted that when the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not. *In re Spada,* 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Thus, the burden has shifted to the Applicant to provide evidence that the properties are not inherent in the prior art materials. *In re Best,* 562 F.2d at 1255, 195 USPQ at 433. Therefore, the rejections are maintained.

I (B). The applicant argues that Bjornberg et al. fails to teach texturing the back sheet with heat and pressure to create the composite structure (Appeal Brief, pages 11 – 12). The applicant argues there is no application of heat and pressure to the back sheet to create elevations and depressions. However, as set forth above, the Bjornberg et al. teaches that the cover layer, which is already textured, can be bonded to a back sheet layer by heat welding (column 7, lines 15 – 20). Heat welding includes using heat and pressure applied to the bond regions to create the desired bond lines, which will inherently compress and emboss the layers together at the bond lines. And since the heat and pressure are only applied in the bond regions the back sheet layer, the unbonded regions in the pocket portions of the composite will have a different thickness and density than the compressed bond lines. Therefore, the fabric will inherently have a degree of embossing in both layers at the bond lines due to the heat welding, which produces a texturized back sheet with some degree of depressions in the bond regions and elevations in the regions which have not been bonded. Therefor, the rejection is maintained.

I (C). The applicant argues there is no motivation to combine Bjornberg et al. and Tanzer et al. (Appeal Brief, pages 12 – 13). Particularly the applicant argues that the prior art provides no intrinsic or extrinsic justification for the proposed combination of Bjornberg et al. and Tanzer et al. However, as set forth above, both references are drawn to absorbent structures. Bjornberg et al. teaches that film layers and any conventionally known back sheet materials can be used as the back sheet of the absorbent composite (column 3, lines 57 – 65). Tanzer et al. discloses that an absorbent structure can use various types of materials as the backing sheet (column 6, lines 15 – 30). Further, Tanzer et al. suggests that the back sheet be formed from a breathable sheet, which allows moisture to pass through, while preventing liquid from passing through (column 6, lines

60 – 68). Thus, Bjornberg et al. provides explicit motivation to look to absorbent articles and used various types of conventional back sheets. Further, Tanzer et al. discloses that breathable back sheets help by allowing moisture to pass through the layer while preventing any liquid from pass through the layer, which would be an improvement over a liquid impermeable sheet. Thus, both references provide explicitly motivation to combine the references together and is not based on improper hindsight or the applicant's own invention. Therefore, the rejection is maintained.

II (A). The applicant argues that Baer et al. and Tanzer et al. fail to teach or suggest the width to height ratio of less than about 10 (Appeal Brief, pages 14 – 15). As set forth above, Baer et al. discloses that various shapes and configurations can be used to produce the absorbent composite (Figures 2 and 5 – 7). Further, the bonding lines act as channel and allow the excess liquid to quickly flow to adjacent and remote areas in the absorbent. Additionally, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Also, a change of size is generally recognized as being within the ordinary level of skill in the art. *In re Dailey*, 357 F.2nd 669, 149 USPQ 1966. Thus, it would have been obvious to one having ordinary skill in the art to optimize the shape of the pockets to produce a width to height ratio of less than about 10. The applicant has provided no evidence of unexpected results that the claimed width to height ratio would not be obvious or a routine matter of optimization of the shape and size of the pocket regions.

II (B). The applicant argues that no motivation exists to combine Baer et al. and Tanzer et al. (Appeal Brief, pages 15 – 16). The applicant argues that Tanzer et al. is directed to the backsheet for the entire diaper, or absorbent structure, and not to the backsheet of a composite

having textured pockets. However, Baer et al. discloses that the absorbent composite can be used by itself as an absorbent article and it would need a liquid impermeable backing layer (column 5, lines 1 – 20). Further, the backing layer can be a film layer of some sort. Thus, Baer et al. requires a film backsheet which can be used as a backsheet for an entire absorbent article. Therefore, it would have been within the general skill level in the art to look to references which teach materials that can be used as a flexible, liquid impervious backing layer of an entire absorbent. Thus, Tanzer et al. provides a teaching of flexible film materials which are used as the backing layer in absorbent products to provide a liquid barrier. Further, Tanzer et al. teaches that breathable layers which allow moisture to pass through while preventing liquid from passing through the back sheet can be used as the back sheet of an absorbent composite. Thus, the references do provide motivation for the breathable materials taught by Tanzer et al. to be used in the absorbent article of Baer et al. The rejection does not depend on improper hindsight. Therefore, the rejection is maintained.

III. The applicant argues that the combination of Baer et al. and Bjornberg et al. is not proper because one of ordinary skill in the art would not have found it obvious to combine Bjornberg et al. and Baer et al. together (Appeal Brief, pages 16 – 18). Baer et al. teaches a method of depositing the absorbent particles by uniformly depositing the particles onto the lower layer without using a suctional force to facilitate the positioning of the particles. The layers of Baer et al. are passed through patterned rollers under heat and pressure to texturize and shape the composite fabric forming the pocketed composite. While Bjornberg et al. discloses that texturing can be produced in the layers with a vacuum source, a patterned roller, and a heat source. The vacuum force shapes the layer while it is heated against the patterned roller forming

a texturized layer. The absorbent material is then applied via vacuum to pocket regions of the layers. And finally, the layers are joined together by an adhesive or heat welding.

The applicant states that the Bjornberg et al. is a complex system that requires a multi-perforate roller and vacuum chambers, so there is no reason to combine Baer et al. and Bjornberg et al. First, it is noted that the applicant argument is based on the fact that Bjornberg et al. discloses using an adhesive. However, Bjornberg et al. explicitly teaches that the outer layers can be heat welded, or thermally bonded instead of glued together. Thus, the final step of the process of Bjornberg et al. can include heated rollers to bond the outer layers together. Further, Bjornberg et al. teaches using the vacuum forces to control the shape of the pockets, the amount of material in the pockets, and the precision to which the absorbent material is deposited. Particularly, Bjornberg et al. discloses that since the absorbent material is strongly drawn to the pockets the pockets are not overfilled with absorbent material and no absorbent material is left on the portion of the sheet that overlies the bridges, i.e., where the two layers would be bonded together (column 6, lines 43 – 55). Thus, the vacuum force controls the distribution of the absorbent material and prevents excess material from being located in the bonding regions. Hence, the vacuum process taught by Bjornberg et al. can be used to supply absorbent material to the pocket regions, taught by Baer et al. to control the deposition of the absorbent material and prevent material from being located in the bonding regions. Further, since Bjornberg et al. suggests that the outer layers can be heat welded, and shows that the outer layers are bonded together via rollers (Figure 4, #17 and #59). Thus, the application of the absorbent material taught by Bjornberg et al. using suction can be to fill the pocket regions and then the layers can be bonded together via the patterned rollers as taught by Baer et al. As set forth above, it would

have been obvious to one having ordinary skill in the to use the method of applying absorbent material, taught by Bjornberg et al. in the process of Baer et al. to control the location and amount of absorbent material applied to the pocketed composite of Baer et al. Thus, the rejection is maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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